WHAT IS CLAIMED IS:

1. A welding wire of the type which consists of a plated or uncovered solid wire and a flux-cored wire for carbon steel or stainless steel, characterized in that at least one hydrocarbon compound selected from the group consisting of saturated or unsaturated hydrocarbon compounds, which have from 5 to 12 carbon atoms and a linear or branched structure, and hydrocarbon compounds having a cyclic structure is present on a wire surface.

2. A welding wire according to Claim 1, wherein said at least one member consists of the saturated or unsaturated hydrocarbon compound having a linear or branched structure, and said hydrocarbon compound consists of a carboxylic acid or a metal salt thereof.

3. A welding wire according to Claim 2, wherein said carboxylic acid is a member selected from the group consisting of pentanoic acid, caproic acid, caprylic acid, octylic acid, secanoic acid, capric acid, decanoic acid, lauric acid, linderic acid and synthetic fatty acids.

4. A welding wire according to Claim 3, wherein said metal salt consists of a member selected from the group consisting of those salts of said carboxylic acids defined in Claim 3 and metals selected from Li, Na, Mg, Al, K,

Ca, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Zr, Sn, Cs, Pb and Ce.

5. A welding wire according to Claim 1, wherein said hydrocarbon compound having a cyclic structure consists of a carboxylic acid or a metal salt thereof.

6. A welding wire according to Claim 5, wherein said hydrocarbon compound consists of naphthenic acid having a five-membered ring or six-membered ring structure.

7. A welding wire according to Claim 5, wherein said hydrocarbon compound consists of at least one metal naphthenate containing a metal selected from the group consisting of Li, Na, Mg, Al, K, Ca, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Zr, Sn, Cs, Pb and Ce.

8. A welding wire according to Claim 5, wherein said hydrocarbon compound consists of at least one metal naphthenate of naphthenic acid and a metal selected from the group consisting of Li, Na, Mg, Al, K, Ca, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Zr, Sn, Cs, Pb and Ce.

9. A welding wire according to any one of Claims 1 to 8, further comprising at least one lubricating oil selected from the group consisting of animal and plant oils, mineral oils, and synthetic oils, said at least one lubricating oil being present on the wire surface.

10. A welding wire according to Claim 9, wherein said at least one hydrocarbon compound and said at least one lubricating oil are deposited on the wire surface in a total amount of 0.1 to 5 g per 10 kg of the wire.

11. A welding wire according to any one of Claims 1 to 10, further comprising lubricating particles present on the wire surface, said lubricating particles being made of at least one member selected from the group consisting of molybdenum disulfide, tungsten disulfide, graphite carbon and polytetrafluoroethylene.

12. A welding wire according to Claim 11, wherein said at least one hydrocarbon compound, and said lubricating particles are deposited on the wire surface in a total amount of 0.1 to 5g per 10 kg of the wire.